

Class 9037 Type H, with Screw-in Bushing



Table 12 contains ordering information for Class 9037 Type H float switches and factory installed modifications. Consult your local Square D field office when using float switches in liquids with a different specific gravity than water (1.0).

When ordering factory installed modifications, add the Form number to the end of the float switch catalog number. For example, to select a 9037HG36 switch with reverse action, order 9037HG36R.

Table 12: Class 9037 Type H Float Switches

Specifications										
Application	Condensate pumps A 2.5 in. cast-iron bushing attaches the float switch to the tank									
Float movement	Transmitted through a nitrile rubber seal such as a Buna-N quad ring. Occasional replacement may be necessary.									
Tank Pressure	Up to 50 psi									
Temperature	Ambient	up to 220 °F								
	Media	Buna-N seal: up to 215 °F. Viton seal: media up to 250 °F.								
Contact Operation	Close on liquid rise (standard) Open on liquid rise (Form R)									
Float Travel	Determined by the float rod angle. An external pointer indicates the float position.									
Materials (Standard)	#304 SS float, #316 SS rod, 2.5 in. cast iron bushing, brass sealing connector, Buna-N quad ring packing.									
Catalog Numbers										
Float Rod Angle	45°				90° offset					
Water Level Change Minimum–Maximum, in. (mm)	2.00–5.00 (52–127)		2.50–5.00 (64–127)		3.75–7.00 (95–178)		4.25–8.25 (108–210)		6.00–11.50 (152–292)	
Float Position ▲	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right
NEMA Type 1	9037HG34	9037HG33	9037HG36	9037HG35	9037HG38	9037HG37	9037HG30	9037HG39	9037HG32	9037HG31
NEMA Type 4	9037HW34	9037HW33	9037HW36	9037HW35	9037HW38	9037HW37	9037HW30	9037HW39	9037HW32	9037HW31
NEMA Type 7 and 9	9037HR34	9037HR33	9037HR36	9037HR35	9037HR38	9037HR37	9037HR30	9037HR39	9037HR32	9037HR31
CL to CL, in. (mm)	—		3 (76)		4.25 (108)		5 (127)		7 (178)	
Modifications										Form
Omit 2.5 in. bushing										L1
Omit float										L2
Reverse action: contacts open on liquid rise										R ■
Viton packing, 5 oz float (diesel fuel, Types HG, HW, HR30, 31, 32, 37, 38, 39 only)										Z19
Viton packing, for media temperature up to 250 °F										Z20
Viton packing, #316 SS float										Z21

- ▲ Viewed from the front of the switch, facing the indicator scale.
- Type HG is field modifiable. Type HR and HW **cannot** be modified in the field.

For replacement floats, see “Class 9049 Accessories” on page 38.

Table 13 lists the float travel distances for the screw-in float switches. Refer to Figure 13.

Figure 13: Travel Dimensions

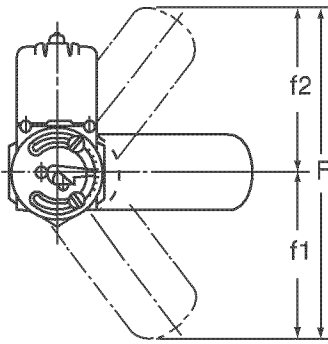


Table 13: Type H Float Travel Distances

Float Rod Angle	R in. (mm)	H ▲ in. (mm)	f1 in. (mm)		f2 in. (mm)		F in. (mm)	
			Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
45°	—	6.22 (158)	2.25 (57)	4.50 (114)	2.00 (52)	4.50 (110)	4.25 (108)	9.00 (229)
90° offset	3.00 (76)	4.25 (108)	2.75 (70)	4.25 (108)	2.25 (57)	4.25 (108)	5.00 (127)	7.50 (191)
90° offset	4.25 (108)	5.50 (140)	3.50 (89)	5.50 (140)	2.75 (70)	4.00 (102)	6.25 (159)	9.50 (241)
90° offset	5.00 (127)	6.25 (159)	3.75 (95)	6.25 (159)	3.00 (76)	4.50 (110)	6.75 (171)	10.75 (273)
90° offset	7.00 (178)	8.25 (210)	4.75 (121)	8.25 (210)	3.75 (95)	5.75 (146)	8.50 (216)	14.00 (356)

▲ Clearance from centerline of hub to side of tank.

Figure 14: Type HG—45° Angle Dimensions

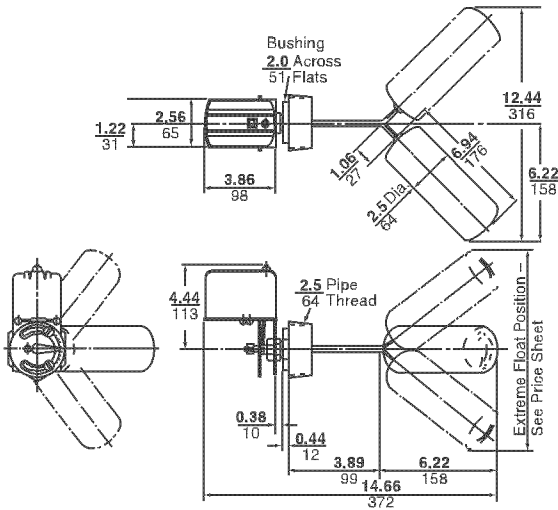


Figure 15: Type HG—90° Offset Dimensions

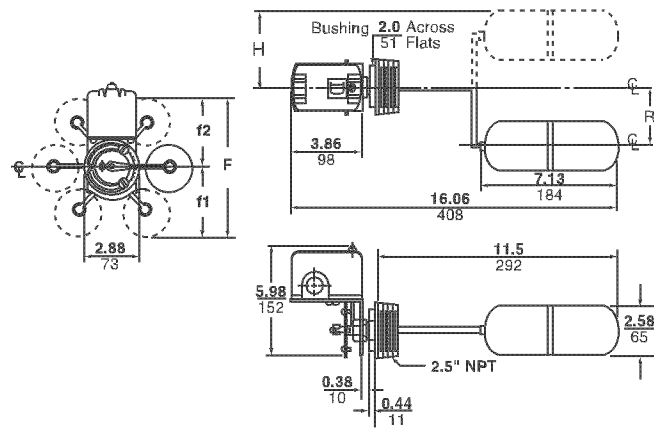


Figure 16: Type HR/HW—45° Angle Dimensions

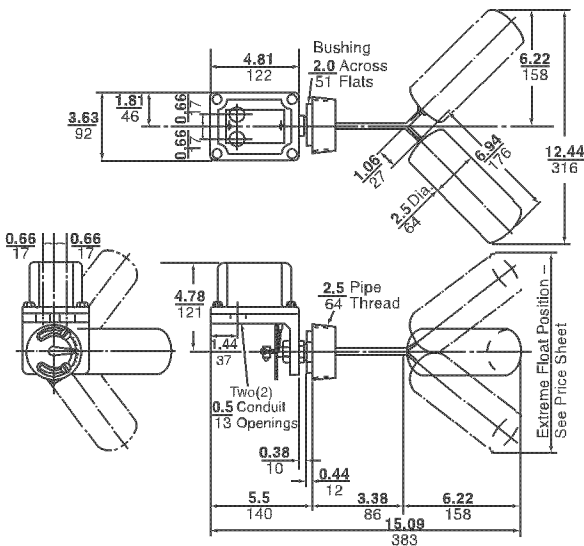
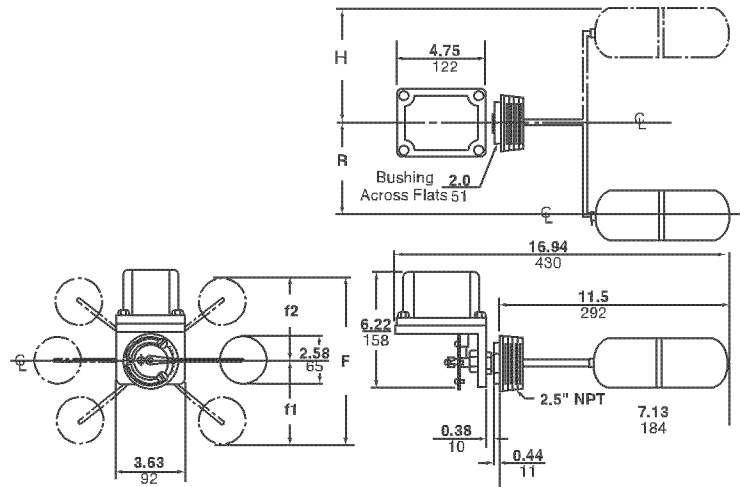


Figure 17: Type HR/HW—90° Offset Dimensions



Dual Dimensions: $\frac{\text{in.}}{\text{mm}}$

Accessories

Table 24: Class 9049 Accessories

Catalog Number	Description	Equipment To Be Serviced
9049A6	7 in. Tapped at Top #304 Stainless Steel Float, 5 ft Brass rod, 2 stops	All 9036, 9038A
9049A6A	7 in. Tapped at Top #304 Stainless Steel Float, 5 ft Aluminum rod, 2 stops	All 9036, 9038A
9049A6C	7 in. Center Hole #304 Stainless Steel Float, 5 ft Brass rod, 4 stops	All 9036, 9038A
9049A6CA	7 in. Center Hole #304 Stainless Steel Float, 5 ft Aluminum rod, 4 stops	All 9036, 9038A
9049A6CS	7 in. Center Hole #316 Stainless Steel Float, 5 ft Stainless Steel rod, 4 Stainless Steel stops	All 9036, 9038A
9049A6S	7 in. Tapped at top #316 Stainless Steel Float, 5 ft Stainless Steel rod, 2 Stainless Steel stops	All 9036, 9038A
9049AF1	7 in. Round Center Hole #304 Stainless Steel Replacement Float (<i>do not remove ballast</i>)	9049A6C, A6CA, DRA31
9049AF2	7 in. Round Center Hole #316 Stainless Steel Replacement Float (<i>do not remove ballast</i>)	9049A6CS, DRA32
9049AF3	7 in. Round Tapped at top #304 Stainless Steel Replacement Float (<i>do not remove ballast</i>)	9049A6, A6A, DCA1, DCA3
9049AF4	7 in. Round Tapped at top #316 Stainless Steel Replacement Float (<i>do not remove ballast</i>)	9049A6S, DCA2, DCA4
9049A13	Compensating Spring	9036GG
9049A15	Compensating Spring	9038AG
9049A19	Compensating Spring	9036DG
9049A20	Compensating Spring	9036DR, DW
9049A54	Mounting Bracket—Replacing obsolete 9036A with 9036G	9036GG
9049A55	Mounting Bracket—Replacing 9036A (S or F1) with 9036G	9036GG
9049A58	Form R lever	9036DG
9049EF1	#304 Stainless Steel Float (<i>do not remove ballast</i>)	9037E, 9038D
9049EF2	#316 Stainless Steel Float (<i>do not remove ballast</i>)	9037E, 9038D
9049ER1	1-3/4 in. Stainless Steel Rod	9037E, 9038D
9049ER2	2-1/2 in. Stainless Steel Rod	9037E, 9038D
9049ER3	3-1/4 in. Stainless Steel Rod	9037E, 9038D
9049ER5	5-1/4 in. Stainless Steel Rod	9037E, 9038D
9049ER7	7-1/4 in. Stainless Steel Rod	9037E, 9038D
9049ER12	12-1/4 in. Stainless Steel Rod	9037E, 9038D
9049GF1	#304 Stainless Steel Float (<i>do not remove ballast</i>)	9037G
9049GF2	#316 Stainless Steel Float (<i>do not remove ballast</i>)	9037G
9049HF3	#304 Stainless Steel Float (<i>do not remove ballast</i>)	9037H, 9038C, D ▲
9049HF4	#316 Stainless Steel Float (<i>do not remove ballast</i>)	9037H, 9038C, D ▲
9049T1	Additional Rod Kit: One 2-1/2 ft section of Brass rod, connector	9049A6, A6C
9049T1A	Additional Rod Kit: One 2-1/2 ft section of Aluminum rod, connector	9049A6A, A6CA
9049T1S	Additional Rod Kit: One 2-1/2 ft section of Stainless Steel rod, connector	9049A6S, A6CS
9049UMS1	Universal Mounting Bracket	All 9036; 9038AG, AR, AW

▲ Not recommended for 9038D mechanical alternators. 9049EF1 (#304 SS) and 9049EF2 (#316 SS) are recommended instead.

Renewal Parts Kits

Renewal parts are generally available for Pump Control products with a current date code or with a numerical date code (such as 172, which corresponds to the first quarter of 1972). Parts are no longer available for devices manufactured before 1965.

Table 25: Class 9998 Renewal Parts Kits for Class 9036–9038 Devices

Catalog Number	Description	Equipment To Be Serviced
9998A01	Replacement High-Level Alarm, Single-Pole Snap Switch, SPDT	Form N5
9998C03	Replacement High-Level Alarm, Double-Pole Snap Switch, DPDT	Form N25
9998PC213	Replacement Switch Mechanism	9036GR, GW, Series C (All Except Form H and R)
9998PC214	Replacement Switch Mechanism	9036GR, GW, Series C (Form R Only)
9998PC215	Replacement Switch Mechanism	9036GR, GW, Series C (Form H Only)
9998PC216	Cover Gasket	9036, 9037 GW Only
9998PC286	Replacement Switch Mechanism	9036DR1, DW1, Series B, Form C
9998PC287	Replacement Switch Mechanism	9036DR1, DW1, Series B, Form R
9998PC319	Replacement Switch Mechanism	9035DG11
9998PC334	Replacement Switch Mechanism	9035DR10, DW10, DR30, DW30
9998PC335	Replacement Switch Mechanism	9035DR11, DW11, DR31, DW31